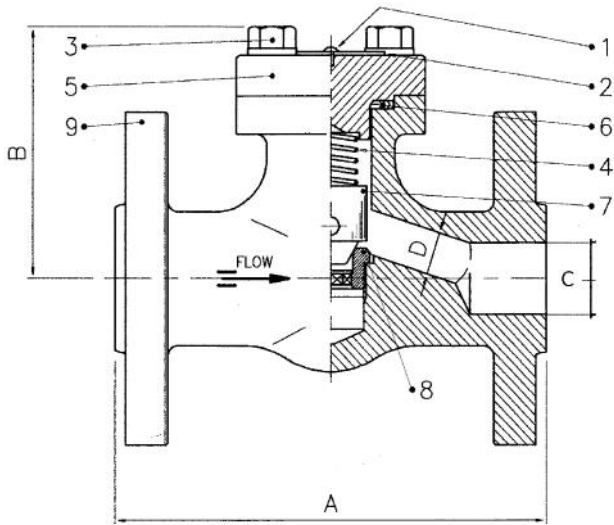


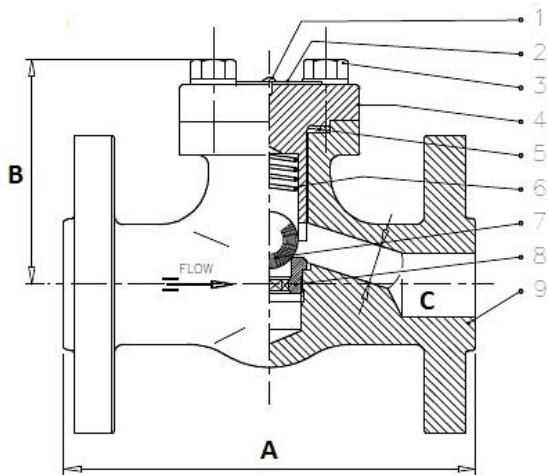
150-300-600 Lbs

DT-FPCV-002



BASIC DESIGN STANDARDS

Basic Design	ISO 15761- BS 5352
Wall Thickness / Pressure / Temperature	According to ANSI B16.34
Ends	RF according to ANSI
Dimensions	B16.5
Bore	Reduced & Full



TEST PRESSURE TO API 598 bar

Class	Shell (water)	Seat (water)	Seat (air)
150	30	22	6.0
300	77	57	6.0
600	153	113	6.0

BILL OF MATERIALS STANDARD ACCORDING TO ASTM

No	Part Name	Carbon Steel		Alloy Steel	Stainless Steel
		A105/F6 (**)	A105/F6 HF	F11/F6 HF	SS316
01	Rivet	Carbon Steel	Carbon Steel	Carbon Steel	Carbon Steel
02	Name Plate	Aluminium	Aluminium	Aluminium	INOX
03	Bolts B/C	A193 B7	A193 B7	A193 B7	A193 B8
04	Spring	A479 TP316	A479 TP316	A479 TP316	A479 TP316/L
05	Cover	ASTM A105N	ASTM A105N	ASTM A182 Gr. F11	ASTM A182 Gr. F316L
06	*Gasket B/C	F316 + Graphoil	F316 + Graphoil	F316 + Graphoil	F316 + Graphoil
07	Piston	A479 TP410	A479 TP410 + ST.6	A479 TP410 + ST.6	A479 TP316L
08	Seat	A479 TP410	A479 TP410 + ST.6	A479 TP410 + ST.6	A479 TP316L
09	Body	ASTM A105N	ASTM A105N	ASTM A182 Gr. F11	ASTM A182 Gr. F316L

* Recommended Spare Parts

(**) available from stock

150-300-600 Lbs

SIZE (Reduced Bore)		DIMENSION in mm (ANSI 150#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	108	70	9	-	2.6
3/4"	20	118	80	12.5	-	3.8
1"	25	127	92	117.5	-	5.1
1-1/2"	40	165	100	29	-	8.9
2"	50	203	140	35	-	14.3

SIZE (Full Bore)		DIMENSION in mm (ANSI 150#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	108	76	12	-	2.8
3/4"	20	118	80	16	-	4
1"	25	127	92	21	-	5.3
1-1/2"	40	165	100	33	-	9
2"	50	203	140	45	-	15

SIZE (Reduced Bore)		DIMENSION in mm (ANSI 300#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	152.5	50	9	-	2.8
3/4"	20	178	55	12.5	-	4.7
1"	25	203	70	17.5	-	5.7
1-1/2"	40	229	98	29	-	11.8
2"	50	267	110	35	-	17

SIZE (Full Bore)		DIMENSION in mm (ANSI 300#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	152.5	80	12	-	3
3/4"	20	178	85	17.5	-	5.1
1"	25	203	95	21	-	6
1-1/2"	40	229	102	35	-	12.5
2"	50	267	145	45	-	19

FORGED STEEL PISTON CHECK VALVES CLASS 150-300-600 LBS

150-300-600 Lbs

SIZE (Reduced Bore)		DIMENSION in mm (ANSI 600#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	165	50	9	-	2.9
3/4"	20	191	55	12.5	-	4.8
1"	25	210	70	17.5	-	9.7
1-1/2"	40	241	98	29	-	12
2"	50	292	110	35	-	17.3

SIZE (Full Bore)		DIMENSION in mm (ANSI 600#) BB/WB				
Inches	mm	A	B	C	D	Kg (HANDWHEEL)
1/2"	15	165	80	12	-	3.1
3/4"	20	191	85	16	-	5.3
1"	25	210	95	22	-	6.2
1-1/2"	40	241	102	34	-	12.8
2"	50	292	145	45	-	19.2

FORGED STEEL PISTON CHECK VALVES CLASS 150-300-600 LBS

150-300-600 Lbs

FORGED STEEL PISTON CHECK VALVES CLASS 150- 300-600 LBS

ASTM A105		PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34		
Temperature °C	WORKING PRESSURE (bar.g)			
	ASTM A105N (a)			
	150#	300#	600#	
-29 to 38	19.7	51.0	102.1	
93	17.9	46.6	93.1	
149	15.9	45.2	90.7	
204	13.8	43.8	87.6	
260	11.7	41.4	82.8	
316	9.7	37.9	75.5	
343	8.6	36.9	74.1	
371	7.6	36.9	73.4	
399	6.6	34.8	69.7	
427	5.5	28.3	56.9	
454	4.5	18.6	36.9	
482	3.4	11.7	23.8	
510	2.4	7.2	14.1	
538	1.4	3.4	7.2	

(a) Permissible, but not recommended for prolonged usage above 427 °C

ASTM A182 F316		PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34		
Temperature °C	WORKING PRESSURE (bar.g)			
	ASTM A105N (a)			
	150#	300#	600#	
-29 to 38	19.0	49.7	99.3	
93	16.2	42.8	85.5	
149	14.8	38.6	77.2	
204	13.4	35.5	70.7	
260	11.7	33.1	65.9	
316	9.7	31.0	62.1	
343	8.6	30.7	61.4	
371	7.6	29.7	60.0	
399	6.6	29.3	59.0	
427	5.5	29.0	58.3	
454	4.5	29.0	57.6	
482	3.4	28.6	57.2	
510	2.4	26.6	53.4	
538	1.4	24.1	48.3	
566	1.4	23.8	47.2	
593	1.4	21.0	42.1	
621	1.4	16.2	32.8	
649	1.4	112.8	25.5	
677	1.4	10.0	20.3	
704	1.4	7.9	16.2	
732	1.4	6.6	13.1	
760	1.4	5.2	10.3	
788	1.4	4.1	7.9	
816	1.4	2.8	5.9	

(b) Permissible, but not recommended for prolonged usage above 427 °C

150-300-600 Lbs

ASTM A182 F11	PRESSURE – TEMPERATURE RATINGS TO ANSI B16.34		
Temperature °C	WORKING PRESSURE (bar.g)		
	ASTM A105N (a)		
	150#	300#	600#
-29 to 38	20	51.7	103.4
93	17.93	51.7	103.4
149	15.86	49.7	99.7
204	13.79	47.9	95.5
260	11.72	45.9	91.7
316	9.655	41.7	83.4
343	8.621	40.7	91.0
371	7.586	39.3	78.3
399	6.552	36.6	73.4
427	5.517	35.2	70.0
454	4.483	33.4	67.2
482	3.448	31.0	62.1
510	2.414	22.1	44.1
538	1.379	14.8	29.7
566	1.379	10.0	20.0
593	1.379	6.6	13.1
621	1.379	4.1	8.6
649	1.034	2.8	5.2

(c) For welding end valves only: Flanged end ratings terminate at 538°C

FORGED STEEL PISTON CHECK VALVES CLASS 150- 300-600 LBS